

From glowbugs@theporch.com Tue Dec 10 10:45:39 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1])
by uro.theporch.com (8.8.4/AUX-3.1.1)
with SMTP id KAA18148;
Tue, 10 Dec 1996 10:39:35 -0600 (CST)
Date: Tue, 10 Dec 1996 10:39:35 -0600 (CST)
Message-Id: <199612101639.KAA18148@uro.theporch.com>
Errors-To: ws4s@infoave.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 378
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 378

Topics covered in this issue include:

- 1) The Superstition Hamfest
by jefffd@coriolis.com (Jeff Duntemann)
- 2) Re: World Radio Labs TC6-A
by jefffd@coriolis.com (Jeff Duntemann)
- 3) Items For Sale
by jkh@lexis-nexis.com (John Heck)
- 4) Dow Key T/R switch
by Doug <doug@sunrise.alpinet.net>
- 5) Homebrewed slug-tuned inductors
by jefffd@coriolis.com (Jeff Duntemann)
- 6) Net Sked & Procedures
by Bob Marsh <bmarsh@hicom.net>
- 7) Re: Net Sked & Procedures
by "Brian Carling" <bry@mnsinc.com>
- 8) Hookup wWire and Dial Pla
by ralph.hartwell@emachine.com (Ralph Hartwell)
- 9) Re: Hookup wWire and Dial Pla
by Roy Morgan <morgan@speckle.ncsl.nist.gov>

Date: Mon, 9 Dec 1996 11:12:31 -0700
From: jefffd@coriolis.com (Jeff Duntemann)
To: glowbugs@theporch.com

Subject: The Superstition Hamfest

Message-ID: <1.5.4.32.19961209110703.0096e718@ntserver.coriolis.com>

Hi gang--

I cruised the Superstition Hamfest last Saturday, an event I never miss, even though it almost invariably rains. (Yes, I know, this is ARIZONA...how lucky can I get?) The weather this time was marvelous, however, which made the modest turnout fairly surprising.

It was not a good hamfest for "greasy junk" caches, which are what I look for. I bought one box of oddments for \$3 because I dug a little and saw several hundred 1 and 2 watt carbon resistors on the bottom, but they were well-hid. Another \$4 box was some old guy's switch collection, which I bought (honestly!) because it had a number of those nice little toggle switch ON/OFF plates you can't hardly get anymore.

I bought a BIG box of glowbug-era magazines that contains a lot of duplicates, but it filled numerous holes in my library that made it all worthwhile. I'll be giving the dupes away here online once I figure a way to do it that won't take a great deal of time. Suggestions solicited.

My BIG gamble this time was a kind of a heartbreaker: A museum-quality Central Electronics 100V that doesn't work. The thing is squeaky clean and cosmetically flawless (and doesn't smell funny--that's my most important test, as burned transformers are tough to replace) but doesn't seem to be getting drive to the finals. I'll be looking more closely at it next weekend, but the 100V is black art to me and if anyone else on this list has a 100V and knows it well I'd like to perhaps initiate some off-list conversation. I've wanted a 100V for twenty years, ever since I put a beat-to-hell 10B on sideband when I got my general, and I intend to make it my main "commercial" glowbug rig, and a suitable mate for my good-to-very-good 75A4. If I can make it work without much bother it'll have been a steal for \$100, and it's trooly beeyootiful to behold.

Another hamfest weirdness that has always made me smile is that the very same power transformer sitting on some guy's table will be marked \$10 but bolted to a greasy fifties power supply with wires hanging out can be had for \$1, or "buy duh box an i'll trow in dis power supply." I did that again and actually discovered that the supply works and puts out 425 volts at I would guess fifty/sixty mils. Best buck I've spent in awhile!

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 9 Dec 1996 11:15:24 -0700
From: jeffd@coriolis.com (Jeff Duntemann)
To: kemkerj@xyzzy.net
Cc: glowbugs@theporch.com
Subject: Re: World Radio Labs TC6-A
Message-ID: <1.5.4.32.19961209110957.00f1f198@ntserver.coriolis.com>

>Now to get that dipole tuned...Anybody wanna talk on 50.4? (I'm
>rockbound.)

Love to! Course, I'm in Arizona, so we may have to wait until 1999 and a
few sunspots...

The ol' Clegg 99er is gonna get some SERIOUS exercise in a couple of years.

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 9 Dec 96 13:26:18 EST
From: jkh@lexis-nexis.com (John Heck)
To: glowbugs@theporch.com
Cc: jkh@lexis-nexis.com
Subject: Items For Sale
Message-ID: <9612091826.AA19268@beans.lexis-nexis.com>

Folks,
I have the following items to sell. I hope they are described adequately in the
text
but anyone with questions or offers please email me offline.

- 1) HP Model 400D VTVM
 - * measures RMS volts/decibels in 12 ranges from .001 to 300 volts.
 - * Dusty, but in otherwise good condition
 - * No leads
 - * This meter has been well cared for but I can't guarantee electrical condition

* Price \$25 plus shipping

2) Motorola Test Set

* Model S1057A Portable

* UNit is in excellent condition but has a little hangar rash on the case.

* Used to troubleshoot Motorola rcvrs and xmtrs. VHF, I *think*.

* Seems to have a complete set of leads.

* Selling *AS IS* as I have no idea how this tester works.

* Price \$20.00 plus shipping

I will include a "Motorola DC/RF alignment meter Tek 7A" with this set

3) Weston VTVM Model TS-375A/U

* Military. "M-98" stenciled on back, "TS-375/U" stenciled both sides.

* Fair condition except missing the front cover.

* Has a DC and an AC probe.

* Covers 300v +/- DC in 5 ranges, and AC volts to 120v in 4 ranges.

* Previously owned by W8LT(call painted on the top)

* Seems to work OK.

* Price \$20.00 plus shipping

Date: Mon, 09 Dec 1996 13:05:27 -0700
From: Doug <doug@sunrise.alpinet.net>
To: glowbugs@theporch.com
Subject: Dow Key T/R switch
Message-ID: <32AC7107.2556@alpinet.net>

Hi folks...just a question. I was re-arranging the shack to allow for more nifty projects to be hooked up to the antenna system and came upon my trusty old Dow Key switch. Thinking it'd be just the ticket to hook up the small tube rigs with the R390A, I put it in the system...fired up the power supply and Wham...the coil apparently faulted to the core. So, now here I am with a busted relay and no fun to be had, short of constructing a suitable replacement with a standard relay in a box.

Is there anyone out there who has one of these little buggers that they would like to part with? Or, just the parts to change out the coil for another one...any voltage will do.

I've got my shack completely torn down to make these changes, adding two 7ft bays and all new cabling and RF wiring. So, was hoping to get it all back together soon...sigh.

Thanks

Doug Dunn, K7YD
Livingston, MT

Date: Mon, 9 Dec 1996 12:57:02 -0700
From: jeffd@coriolis.com (Jeff Duntemann)
To: glowbugs@theporch.com
Subject: Homebrewed slug-tuned inductors
Message-ID: <1.5.4.32.19961209125134.00f6d4ec@ntserver.coriolis.com>

<This message was originally sent on 12/2 and got lost before it hit
Conard's server...>

Hi gang--

I've had to do some travelling and haven't been out in the garage much--and not much progress has been made on my 6U8A superhet as a result. Last night, however, I finally got out there and did a little engineering which merits reporting here.

The original circuit (from the April, 1966 QST) has a tuned triode RF amp up front. A 2-section 365pf variable tunes the input and output circuit of the triode, and identical inductors wound on pill bottles resonate with the two sections of the variable.

Now, I've had enough trouble with tracking in tuned circuits like this not to trust solenoid coils without any means of tuning. No matter how carefully you wind them, they're never going to be *precisely* the same inductance, and the gain or selectivity of the RF stage will suffer. This is to be primarily a CW receiver, so I want those skirts just *so*--and in my mind that calls for slug-tuned inductors.

(As a related aside here, I'm actually using a 3-section variable from AES, and have a "spare" triode section in that first 6U8. This suggests that I could build a 2-stage RF amp without adding any additional bulk apart from a third coil--but I seriously doubt I could make the three tuned circuits track well enough to make the effort worthwhile.)

I have a coffee can full of greasy slug-tuned coils and a couple of naked forms, but these are unobtainium now and I want other people to be able to duplicate this design once I perfect it. So I started digging through my Big Box 'o Plasticrappola looking for inspiration.

After half an hour, here's what I found: There's a very common size of thermal FAX paper roll wound on a thin plastic core. The outside diameter of the core is exactly 3/4". The inside diameter is 7/16", and the inner and outer tubes are separated by short "vanes" to make a solid plastic core unnecessary. (These cores replaced an older type made of thick cardboard, of which I have a few too.) The vanes make nice "passageways" through the

core for wire leads, too.

I also found that the thinnest common type of 1/2" PVC pipe has a 3/4" ID and fits snugly over the outside of that FAX paper core. Better still, the outside diameter of the PVC pipe fits (as you might expect) into a standard 1/2" PVC pipe cap. A 1/2" length of the PVC pipe thus serves as a bushing to make the FAX paper core fit snugly into a 1/2" PVC pipe cap.

Now, do your best to envision this: I drilled and tapped a 6-32 machine screw thread into the center of the PVC pipe cap. I dug out a nylon spacer tapped 6-32 straight through. (Digi-Key and other places sell these and I use them a lot.) Using a 6-32 nylon binder-head screw, I attached two T37-2 iron powder toroid cores to one end of the nylon spacer. I dug out a 2" brass 6-32 machine screw, threaded it through the tapped hole in the center of the PVC pipe cap, and then threaded it into the opposite end of the nylon spacer until it met the end of the nylon binder-head screw. No need for a lock nut or loktite.

If you can picture this now, we have a 3/8" diameter iron powder slug parked neatly and without undue stress on the end of a brass machine screw threaded through a hole in the middle of a PVC pipe cap. I set this aside and calculated my first coil. After a little fussing I found that 16 turns of #26 enamel, close-wound, resonated the 365pf cap where I wanted it when wound on the end of the FAX paper core. I cut off 1 3/4" of the core containing the winding, smoothed out the cut end, and inserted it into the PVC pipe cap, which already had the bushing inside it. Snug fit, no need for glue.

Voila! A slightly bulky but very cheap homebrew slug-tuned inductor, made with no unobtainium. A second 1/2" PVC pipe cap (I use the kind with flat rather than rounded ends) over the other end of the core makes it easy to bolt the whole thing to the top of my chassis. I still need to add the antenna input winding (and then create the output coil) before I can test the RF amp, but I don't think the mechanical design of the coil will cause any problems.

The only tricky part at all is finding one of these FAX paper cores. Hunt around for FAX machines in your office, and see if they use the type of paper wound on this sort of core. (The dimensions of the core seem to be some sort of standard, halleluia!) Then ask people to save the empty cores for you. The way we use FAX machines these days, you'll soon have a drawer full of the cores, which are a very nice size for HF glowbug work, for transmitters or receivers. (I'm going to wind the tank coil for my eventual "nice" 6L6 rig on FAX paper core stock. No need for slug tuning but vertical mounting to a chassis is easy courtesy the pipe cap.) The iron powder cores, PVC pipe, and nylon items are all standard mail order or Home Depot stuff.

I'll post photos of the coil and the evolving receiver, especially if I get a digital camera for Christmas, as I've been hinting for some time...

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 09 Dec 1996 20:26:42 -0500
From: Bob Marsh <bmarsh@hicom.net>
To: Glowbugs List Server <glowbugs@theporch.com>,
Subject: Net Sked & Procedures
Message-ID: <32ACBC51.4E1D@hicom.net>

Hi Everyone,

I'd like to try checking into the CW nets on 3579. Can someone post a schedule and include net check-in prosigns/procedures? I've never checked into a CW net, except for the final NJ/DE Navy MARS Net. (MARS is now FORBIDDEN to to use CW).

I'd like very much to participate in these nets now that the HW-16 is running, and the SB-301/401 twins are on the road to recovery.

tnx es 73 de Bob/KB2SGM

Date: Mon, 9 Dec 1996 18:10:15 +0000
From: "Brian Carling" <bry@mnsinc.com>
To: Bob Marsh <bmarsh@hicom.net>
Subject: Re: Net Sked & Procedures
Message-ID: <199612100206.VAA26062@user2.mnsinc.com>

HEY! It's a reply from AF4K!
On 9 Dec 96, Bob Marsh wrote:

> Hi Everyone,
>
> I'd like to try checking into the CW nets on 3579. Can someone post
> a schedule and include net check-in prosigns/procedures? I've never
> checked into a CW net, except for the final NJ/DE Navy MARS Net.
> (MARS is now FORBIDDEN to to use CW).
>
> I'd like very much to participate in these nets now that the HW-16

> is running, and the SB-301/401 twins are on the road to recovery.
>
> tn timer 73 de Bob/KB2SGM

Bob, I think the net gets going around 9 p.m. EST but I never seem to get on at exactly the right time for it! (That is 0200 UTC)

I hear K2UXE on there now calling CQ BA and then working someone I could not raise him myself unfortunately. There is a lot of QRN still tonight.

I hear a VERY VERY weak signal just below K2UXE that may be a GB but I can't hear it under him.

73 de AF4K

Bry

*** 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA *
** E-mail to: bry@mnsinc.com *
*** See the great ham radio resources at: *
** <http://www.mnsinc.com/bry/> *

Date: Tue, 10 Dec 1996 03:04:00 GMT
From: ralph.hartwell@emachines.com (Ralph Hartwell)
To: glowbugs@theporch.com
Subject: Hookup wWire and Dial Pla
Message-ID: <9612092206015720@emachines.com>

T> Having been bummed out by the typical "hookup wire"
T> sold by RS and other outlets (having only a 300-volt
T> rating), I was pleased to see, at my local hardware
T> store, 18-ga TNN electrical wire. All right, 18-ga
T> is a bit thick, but TNN wire is rated at 600 volts
T> (and is also oil/gasoline resistant!). It is stranded
T> unplated copper wire and is available in several colors
T> at 7 cents per foot. I'm using it for all the transmitter
T> projects!

I have used THN and THNN insulated wire for several transmitters with good results, however, I did have one spectacular failure with it. I wound a three layer coil - 4 turns per layer x 3 layers - for part of a tank coil on 160, and found that at about 700 watts the electric field between the layers was strong enough to melt the insulation, which promptly went up in flames and oily black smoke! I haven't had any problems with single layer coils, however. I've also used THNN wire on

ferrite core baluns and transformers with good results.

Ralph W5JGV

PS - Hey folks, when does YOUR license expire? I just got my renewal ticket back in the mail today.

, QMPro 1.53 , Basic Airline Flying- Keep the pointy end forward.

Date: Tue, 10 Dec 1996 09:30:40 -0500
From: Roy Morgan <morgan@speckle.ncsl.nist.gov>
To: glowbugs@theporch.com
Subject: Re: Hookup wWire and Dial Pla
Message-ID: <9612101430.AA13299@speckle.ncsl.nist.gov>

>

>PS - Hey folks, when does YOUR license expire?

1999, and thanks for the reminder.

K1LKY, since 1959.

-- Roy Morgan/Building 820, Room 562/Gaithersburg MD 20899
(National Institute of Standards and Technology, formerly NBS)
301-975-3254 Fax: 301-948-6213 morgan@speckle.ncsl.nist.gov --

End of GLOWBUGS Digest 378
